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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,207	11/09/2006	Georg Mayer	800.0105.U1(US)	3196

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EXAMINER	
PHAM, TIMOTHY X	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/581,207	MAYER ET AL.	
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-11,13-19,21-24,34,39-42,44,46 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-11, 13-19, 21-24, 34, 39-42, 44, and 46-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. Claims 1, 3-11, 13-19, 21-24, 34, 39-42, 44, and 46-47 are pending in this application. Claims 25-26, 37-37, 43, and 45 are required to cancel due to restriction/election filed 9/25/2009.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-11, 13-19, 21-24, 34, 39-42, 44, and 46-47 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claims 25-26, 37-37, 43, and 45 are required to cancel due to restriction/election filed 9/25/2009. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3-11, 13-15, 17, 19, 21-24, 34, 39-42, 44, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrero (US 2005/0009520; Cited in PTO-892 Part of Paper No. 20080912) in view of 3rd Generation Partnership Project - 3GPP TS 32.225 v2.0.0 (2002-09) (hereinafter "3GPP"; Cited in PTO-892 Part of Paper No. 20080912).

Regarding claims 1, 19, 21, 34, 39, 41-42, Herrero discloses a method, an apparatus, a system, comprising:

receiving at a first network element in a communications network a first message from a user equipment (Fig. 2, step 1; paragraphs [0073], [0075], e.g., In step 1 of FIG. 2 said user sends a registration request REGISTER, from terminal UE to the first-contact-point server entity P-CSCF that is serving the access of said UE to said system);

transmitting the first message from the first network element to a serving network element (Fig. 2, step 2; paragraph [0075], e.g., it then forwards the REGISTER to an interrogating server entity I-CSCF, wherein the P-CSCF has added information related to itself as being the first contact point server entity P-CSCF serving the access of said UE);

detecting at the first network element that the serving network element is out of service (paragraphs [0136], e.g., the I-CSCF forwards the INVITE sequentially to more than one of said plurality of S-CSCFs until the INVITE is awarded by one of them; for instance: until a positive response code (such as "200 OK"), is received; it is noted that the time out or the negative response from S-CSCF, then the I-CSCF can tear down the session request; therefore, the first network element (I-CSCF) detects the serving network element (S-CSCF) is out of service);

determining at the first network element a type of the first message (paragraph [0069], e.g., The detailed content of the messages (queries, responses, notifications, etc.)(message type)), wherein determining the type of the first message comprises evaluating content of a predefined information element in the first message (paragraph [0069])

subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type (paragraphs [0077], [0105], noted the re-register message).

Herrero fails to specifically disclose in dependence on the determined type of the first message, sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service.

However, 3GPP discloses in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service (page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned).

Therefore, taking the teachings of Herrero in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to send from the first network element to the user equipment an error message including an indication that the serving network element is out of service for advantages of enhancing Quality of Service in communication system.

Regarding claim 3, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the second message is configured to initiate a registration from the user equipment to the first network element (Herrero: paragraphs [0077], [0105], e.g., registration status).

Regarding claim 4, Herrero in combination with 3GPP discloses the method according to claim 1, wherein a bearer configured to signal is established between the user equipment and the communications network prior to the receiving of the first message (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 5, Herrero in combination with 3GPP discloses the method according to claim 4, further comprising forwarding the first message to a further serving network element (Herrero: Fig. 2, step 2; paragraph [0075]).

Regarding claim 6, Herrero in combination with 3GPP discloses the method according to claim 5, wherein the further serving network element registers the user equipment (Herrero: paragraph [0075], e.g., in step 2 of FIG. 2, it then forwards the REGISTER to an interrogating server entity I-CSCF, wherein the P-CSCF has added information related to itself as being the first contact point server entity P-CSCF serving the access of said UE).

Regarding claim 7, Herrero in combination with 3GPP discloses the method according to claim 4, wherein the bearer comprises a signalling or general purpose packet data protocol context bearer (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Regarding claim 8, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the communications network is an internet protocol multimedia subsystem network (Herrero: paragraphs [0014], [0019], e.g., IMS).

Regarding claim 9, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the first network element comprises an interrogating call session control function (Herrero: paragraph [0049], e.g., I-CSCF).

Regarding claim 10, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the first network element comprises a proxy call session control function (Herrero: paragraph [0048], e.g., P-CSCF).

Regarding claim 11, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the serving network element comprises a serving call session control function (Herrero: paragraph [0050], e.g., S-CSCF).

Regarding claim 13, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the detecting at the first network element that the serving network element is out of service comprises:

at least one of detecting that a predetermined time period has passed since the forwarding of the message from the first network element to the serving network element and before a response has been received from the serving network element (Herrero: paragraphs [0136], [0144], e.g., the I-CSCF can, for instance, set a timer of a pre-defined value when it sends the INVITE to a first S-CSCF; so, once a given period of time has elapsed without receiving said positive response (time-out), or a negative response have been received (e.g.: a SIP response code "4XX"), it shall forward the INVITE to a second S-CSCF, etc.), and

determining that the first message has been transmitted a predetermined number of times (3GPP: page 26; sections 5.1.2.2.1 in its entirety).

Therefore, taking the teachings of Herrero in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to determine that the first message has been transmitted a predetermined number of times for the advantages of promptly taking the appropriate action.

Regarding claim 14, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the type of the first message comprises a re-registration request (Herrero: paragraphs [0077], [0105], noted the re-register message).

Regarding claim 15, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the type of the second message comprises an initial registration request (Herrero: paragraphs [0077], [0105]).

Regarding claim 17, Herrero in combination with 3GPP discloses the method according to claim 1, wherein the information element indicates that a user has been successfully authenticated (Herrero: paragraphs [0072], [0092]).

Regarding claim 22, Herrero in combination with 3GPP discloses the apparatus according to claim 21, wherein the controller is further configured to establish a bearer configured to signal between the apparatus and a communications network (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based) comprising said first network element and said serving network element, and

respond to the error message by dropping the bearer between the apparatus and the communications network ((Herrero: paragraph [0135], e.g., the I-CSCF can tear down the session requests it had sent to the other S-CSCFs (e.g.: sending a SIP cancel request "CANCEL" to said S-CSCFs)).

Regarding claim 23, Herrero in combination with 3GPP discloses the apparatus according to claim 22, wherein the bearer comprises a signalling or general purpose packet data protocol

context bearer (Herrero: paragraphs [0033], [0072], e.g., the registering UE runs to get a radio bearer packet-based).

Claims 24 and 40 are rejected with the same reasons set forth to claim 15.

Claim 46 is rejected with the same reasons set forth to claim 13.

Claims 44 and 47 are drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a controller to perform steps of claim 1 above. Therefore, the same rationale applied to claim 1 applies. In addition, Herrero in combination with 3GPP inherently discloses a computer program product, i.e., given that Herrero /3GPP disclose a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

6. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrero in combination with 3GPP in view of Costa-Requena (US 2004/0225878; Cited in PTO-892; Part of Paper No. 20080912).

Regarding claim 16, the combination of Herrero and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element indicates that the request is sent integrity protected.

However, Costa-Requena discloses wherein the information element indicates that the request is sent integrity protected (paragraph [0062], e.g., both authentication and message integrity protection is used).

Therefore, Herrero in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element indicates that the request is sent integrity protected to provide authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).

Regarding claim 18, the combination of Herrero and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element in the first message is an integrity protected flag in an authorization header of the first message.

However, Costa-Requena discloses wherein the information element in the message is an integrity protected flag in an authorization header of the message (paragraphs [0062], [0063]).

Therefore, Herrero in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element in the message is an integrity protected flag in an Authorization header of the message to provide authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617